CONTROL AND DISTRIBUTION PROTOCOL FOR A PORTABLE ROUTER FRAMEWORK

ABSTRACT OF THE DISCLOSURE

A control and distribution protocol (CDP) is implemented for transport across a backplane bus, through a high-speed serial link or through a switching fabric connection. The protocol includes an intra-system transport of dynamic routing protocol (DRP) IP messages, the distribution of routing information within the router, the transport of control and maintenance messages, and the transport of IP and multi-protocol label switching (MPLS) traffic between ingress and egress ports. The protocol further includes a dynamic routing and control driver which interacts with dynamic routing control applications to exchange messages that are to be transmitted to packet flow processors and to handoff messages received from packet flow processors. A packet flow processor driver which services messages carried between the dynamic routing control and packet flow processors. An IP traffic interface provides transfer of IP L3/L2 protocol data unit (PDU) header primitive from the packet flow processors. Both the DRC driver and PFP driver include a framework transport interface.

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